



Flush pressure sensor with display

PI-004-REA01-E-ZVG/US/ /P

phase-out article

Alternative articles: PI2895 or PI2795
When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 programming button



Product characteristics

Number of inputs and outputs	Number of analogue outputs: 1		
Measuring range	-1...4 bar	-14.5...58 psi	-100...400 kPa
Process connection	threaded connection G 1 external thread sealing cone		

Application

Special feature	Gold-plated contacts		
Application	flush mountable for the food and beverage industry		
Installation	freely rotatable housing 350°		
Media	viscous media and liquids with suspended particles; liquids and gases		
Medium temperature [°C]	-25...125; (145 max. 1h)		
Min. bursting pressure	100 bar	1450 psi	10000 kPa
Pressure rating	30 bar	435 psi	3000 kPa
Type of pressure	relative pressure		
No dead space	yes		



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Electrical data			
Operating voltage	[V]	20...32 DC	
Min. insulation resistance	[MΩ]	100; (500 V DC)	
Protection class		III	
Reverse polarity protection		yes	
Power-on delay time	[s]	0.5	
Switch-on peak current	[mA]	6	
Switch-on peak current duration	[ms]	30	
Integrated watchdog		yes	
Inputs / outputs			
Number of inputs and outputs		Number of analogue outputs: 1	
Outputs			
Total number of outputs		1	
Output signal		analogue signal	
Number of analogue outputs		1	
Analogue current output	[mA]	4...20, invertible; (scalable 1:4)	
Max. load	[Ω]	300	
Overload protection		yes	
Measuring/setting range			
Measuring range		-1...4 bar	-14.5...58 psi -100...400 kPa
Analogue start point		-1...3 bar	-14.5...43.5 psi -100...300 kPa
Analogue end point		0...4 bar	0...58 psi 0...400 kPa
In steps of		0.005 bar	0.05 psi 0.5 kPa
Factory setting			ASP = 0.000 bar AEP = 4.000 bar
Accuracy / deviations			
Repeatability	[% of the span]	< ± 0,1; (with temperature fluctuations < 10 K; Turn down 1:1)	
Characteristics deviation	[% of the span]	< ± 0,2; (Turn down 1:1 , linearity, incl. hysteresis and repeatability , limit value setting to DIN EN IEC 62828-1)	
Linearity deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Hysteresis deviation	[% of the span]	< ± 0,15; (Turn down 1:1)	
Long-term stability	[% of the span]	< ± 0,1; (Turn down 1:1; per year)	
Temperature coefficient zero point	[% of the span / 10 K]	< ± 0,05; (0...70 °C)	
Temperature coefficient span	[% of the span / 10 K]	< ± 0,15; (0...70 °C)	
Response times			
Damping for the analogue output dAA	[s]	0.1...100	
Max. response time analogue output	[ms]	40	



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Software / programming		
Parameter setting options		zero point; span
Operating conditions		
Ambient temperature	[°C]	-25...80
Storage temperature	[°C]	-40...100
Protection		IP 67; IP 69K
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5 Surge	0,5/1 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN IEC 68-2-6	20 g (10...2000 Hz)
MTTF	[years]	238
Mechanical data		
Weight	[g]	440.6
Materials	stainless steel (316L/1.4404); PC; PBT; PEI; FKM; PTFE	
Materials (wetted parts)	ceramics (99.9 % Al2O3); stainless steel (316L/1.4435); surface characteristics: Ra < 0,4 / Rz 4; PTFE	
Min. pressure cycles	100 million	
Process connection	threaded connection G 1 external thread sealing cone	
Displays / operating elements		
Display	Display unit	4 x LED, green
	function display	alphanumeric display, 4-digit
	measured values	alphanumeric display, 4-digit
Display unit	bar; psi; kPa; % of the span	
Remarks		
Remarks	The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		



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Connection



- 1: normal operation
 2: programming operation (P = communication via EPS / FDT interface)